

INDEX

CHEMICAL AND PETROLEUM ENGINEERING

Numbers 1-12, 1966



CHEMICAL AND PETROLEUM ENGINEERING

Numbers 1-12, 1966

(A translation of Khimicheskoe i Neftyanoe Mashinostroenie)

A

Abalyan, N. P. - 311
Abdurashitov, S. A. - 362
Abelev, M. M. - 571
Abramova, Z. A. - 253
Abrosimov, B. Z. - 698
Adugina, N. A. - 271
Aérov, M. É. - 809
Agamalova, L. L. - 753
Ainshtein, V. G. - 291
Akhmechet, Zh. N. - 460
Akhundov, Z. A. - 839
Akopov, R. A. - 215
Akopyan, L. A. - 27
Aksel'rod, L. S. - 599
Akshentseva, A. P. - 262
Akunov, V. I. - 633
Alekseev, G. A. - 758
Alekseev, V. P. - 581, 643
Aliev, K. T. - 215
Altukhov, S. M. - 162
Andrezen, A. B. - 75
Anisimov, V. S. - 629
Annenkov, V. A. - 68
Antonov, A. A. - 179
Archakov, Yu. I. - 388
Arkharov, A. M. - 789
Artamonov, A. Ya. - 764
Artamonov, D. S. - 358
Askerov, M. Yu. - 681
Astakhov, V. I. - 647
Asviyan, M. B. - 57
Avgustov, Yu. A. - 49

B

Babaev, S. G. - 202, 834
Babaev, S. T. - 681
Babayan, S. A. - 396
Bairamov, Ch. G. - 396
Balitskii, S. A. - 603
Baranov, N. S. - 450
Basargin, B. N. - 733
Belya, O. I. - 750
Beletskii, D. G. - 362

Belevtsev, B. A. - 504
Belinkii, A. L. - 795
Belokon', O. V. - 677
Belokurov, P. L. - 429
Belyn, B. M. - 109
Bendrik, V. G. - 260, 280
Berezkina, A. N. - 651
Berezovskii, L. B. - 458
Bespalov, I. G. - 10
Bikchentaev, T. A. - 232, 767
Biletskii, S. M. - 663
Blyakhman, L. I. - 34
Bobrov, V. A. - 266
Bocharov, V. A. - 753
Bokshitskii, M. N. - 654
Borenko, V. A. - 445
Borisoglebskii, A. I. - 155
Borisoglebskii, B. N. - 320
Boyarchuk, P. G. - 358, 809
Braun, V. M. - 581
Bregman, L. P. - 101
Brekhov, K. I. - 287
Britvin, L. N. - 134
Bronshtein, L. M. - 258, 537
Bubnov, V. A. - 769
Budanov, V. D. - 654
Bulaev, V. V. - 280
Burin, V. L. - 805
Burkat, V. S. - 779
Bystrova, T. A. - 809

C

Chechetkin, A. V. - 736
Cherepakhov, G. L. - 383
Cherkasov, V. V. - 677
Chuvpilo, A. V. - 710
Chuzhaikina, T. M. - 10

D

Dan'kin, A. A. - 764
Degtyarev, V. V. - 746, 753
Dekhanov, I. P. - 844
Deryabina, V. I. - 303, 815
Dmitriev, A. A. - 458
Domashnev, A. D. - 228
Dombé, Yu. I. - 783

Dubinskaya, F. E. - 500
Dvortsin, M. D. - 95
D'yakov, V. G. - 253

E

Efremov, E. F. - 476
Éksler, L. I. - 81, 345
Elistratova, L. V. - 10
Ershova, N. I. - 661

F

Faron, Yan - 567
Firtich, V. S. - 770
Frantsuzov, G. K. - 396
Freitag, V. A. - 504
Frolov, V. N. - 668
Frumkin, I. A. - 480

G

Galdyrevskaya, S. A. - 256
Galeev, A. F. - 151
Galitskii, B. A. - 795
Gal'tsov, V. Ya. - 527
Gan, I. I. - 256, 262
Gel'perin, N. I. - 36, 141, 291, 522, 733
Genel', V. A. - 497
Gerasimenko, G. I. - 256, 262
Glozman, L. P. - 64
Golod, S. T. - 760
Golovanenko, S. A. - 243
Golovanova, A. P. - 275, 533
Gorbachev, S. P. - 197
Gorislavets, S. P. - 848
Gorshenev, V. G. - 485
Goryainova, A. V. - 746
Grebeshkova, I. D. - 388
Grekov, I. N. - 258, 537
Grigor'ev, A. A. - 852
Grigor'eva, L. F. - 826
Grishko, V. Z. - 36
Gubenkova, M. G. - 64
Gudnin, N. N. - 362
Gurevich, A. L. - 575
Gur'yanov, A. I. - 151
Gusev, A. A. - 643

Gusev, Yu. I. - 741
Gyandzhutsev, P. A. - 834
Gzovskii, S. Ya. - 42

I

Iashvili, R. Ya. - 367, 728
Il'enkov, D. F. - 550
Il'in, I. A. - 396
Ivanov, V. A. - 647

K

Kagan, I. Z. - 688
Kalyaev, B. I. - 685
Karakulov, A. S. - 753
Karasev, I. N. - 42
Karaulov, V. M. - 191
Karnaugh, M. S. - 75
Karps, Ya. Ya. - 640
Kasimov, B. N. - 552
Katikhin, V. D. - 248
Kavetskii, G. D. - 27
Kazarov, I. N. - 792
Khalilov, A. A. - 207
Khalizova, V. N. - 271
Khanukovich, Yu. M. - 540
Kharisov, M. A. - 705
Kharitonov, V. K. - 225
Kharlampiev, I. G. - 219, 544
Khil'chuk, P. A. - 621
Khimchenko, N. V. - 266
Khitrova, G. V. - 852
Khmara, V. F. - 308
Kil'man, V. V. - 599
Kim, V. S. - 584, 778
Kirsanov, V. A. - 552
Kishkis, V. K. - 514
Klimov, V. P. - 221
Klinov, I. Ya. - 383, 529
Klochkov, V. I. - 773
Kofman, A. P. - 248, 258
Kogan, V. B. - 705
Kolgatin, N. N. - 303, 815
Kol'man-Ivanov, É. É. - 168
Kolosova, L. P. - 795
Kolyada, A. A. - 260
Kolmogorov, I. V. - 661
Konstantinov, V. N. - 773
Koptev, A. A. - 802
Korneev, B. F. - 454
Koshelev, I. V. - 595
Kotelevskii, Yu. M. - 345
Koval', I. M. - 730
Kovalenko, V. G. - 421
Kovalev, E. M. - 730
Kovshov, A. N. - 358, 599
Kozhan, A. P. - 848

Kozlov, V. I. - 480
Kozlov, Yu. I. - 404, 609
Kozulin, N. A. - 88, 437, 707
Kravchenko, L. L. - 53
Kristal', M. M. - 53, 271
Kropivnitskaya, R. A. - 311
Krutik, A. V. - 415
Kukalenko, B. D. - 367
Kulakov, V. M. - 517
Kulikov, A. E. - 445
Kunin, N. F. - 185
Kurganov, V. M. - 798
Kurkumeli, A. A. - 197
Kuz'min, R. V. - 155
Kuznetsova, A. V. - 480
Kuzyukov, A. N. - 219

L

Lagover, I. I. - 809
Lebedev, P. D. - 291
Lerner, A. M. - 829
Lesin, A. D. - 336
Levin, A. N. - 584
Levin, É. A. - 716
Libin, A. L. - 615
Likhachev, G. F. - 258
Lin, S. T. - 404, 609
Loganov, D. T. - 285
Lokshina, R. V. - 336
Lomakina, O. A. - 789
Lopin, A. V. - 830
Lositskii, N. T. - 852
Lyalin, V. A. - 380
Lyubarskii, I. Ya. - 643

M

Magid, M. Z. - 429
Makarov, V. M. - 232, 424, 491
Makarova, A. V. - 813
Makarenko, A. A. - 483
Makhorin, K. E. - 848
Maksimenko, M. Z. - 151
Malkhova, É. K. - 813
Mamon, L. I. - 64
Mamrukova, L. A. - 45
Maragaeva, V. N. - 746, 750
Mirkhadaev, A. A. - 823
Markov, A. A. - 764
Matukhno, A. V. - 64
Matveev, N. A. - 553
Meandrov, L. V. - 243
Medrish, I. N. - 260
Mel'nikov, N. I. - 783
Mikhailov, A. K. - 823
Mikhailov, N. M. - 45

Mikhailus', N. G. - 677
Mikheal', S. Yu. - 418
Mishchenko, M. I. - 13
Mishnaevskii, L. L. - 756
Moiseev, S. T. - 454
Molokanov, A. V. - 299
Monastyrskaya, A. M. - 486, 694
Mordovskii, S. I. - 14
Morgulis, M. L. - 332
Morokh, A. N. - 677
Moroz, I. I. - 758
Moskatov, K. A. - 826

N

Napalkov, G. N. - 291
Navrotskii, Yu. D. - 581, 643
Neugodov, P. P. - 497
Nevesenko, V. I. - 424, 491
Nikiforov, A. D. - 358, 599
Nikolaenko, A. D. - 805
Nizhnikov, N. V. - 460
Nizkii, V. V. - 197
Nosov, A. V. - 674

O

Odnenco, I. V. - 111, 846
Ogorodnikova, G. M. - 842
Osipov, V. V. - 691
Ossovskii, B. G. - 733
Ostanin, V. G. - 480

P

Pashkov, P. O. - 248
Pavlov, N. V. - 256
Pebalk, V. L. - 522
Pereyaslov, G. A. - 612
Petrov, G. V. - 607
Petrov, M. K. - 720
Pinkovskii, Ya. I. - 471
Planovskii, A. N. - 27, 599, 647
Pleikin, A. V. - 221
Ploshenko, I. G. - 68
Plyushkin, S. A. - 367, 728
Poberezkin, A. E. - 581
Pocheptsova, G. G. - 659
Podkol'zin, Ya. P. - 380
Pogosov, G. S. - 802
Pokhodenko, N. T. - 445
Poljak, M. S. - 607
Poluboyartseva, L. A. - 615
Polyakov, D. A. - 546
Popchenkov, I. N. - 779
Popov, A. F. - 489
Porfir'ev, E. I. - 540
Pospelov, F. M. - 474
Pozin, L. S. - 599, 809

Pushko, I. G. - 413
Pushko, N. G. - 689

R

Rachkov, V. I. - 236, 589
Radionova, E. A. - 349
Raevskii, G. V. - 663
Raikhel', A. Ya. - 834
Rakhmilevich, R. Z. - 698
Reifer, A. A. - 615
Reshkin, A. V. - 623
Romankov, P. G. - 367, 728
Rozenfel'd, L. M. - 75
Rubenchik, Yu. I. - 258
Rublev, V. I. - 850
Rumyantsev, A. N. - 760
Rusalkin, V. A. - 752
Ruskol, Yu. S. - 529
Ryabets, N. P. - 111, 846
Ryzhov, A. V. - 16

S

Saenko, V. G. - 101
Sagarda, A. A. - 756
Salomatin, G. A. - 147
Samochatov, I. M. - 283
Samsonov, N. M. - 312
Samsonova, A. A. - 409
Sanzharovskii, A. T. - 49
Sarkisova, A. M. - 829
Sataev, R. A. - 407
Savchenko, V. I. - 36
Selivanov, A. N. - 191
Semikina, L. E. - 830
Shabalin, K. N. - 474
Shakhnazarov, A. A. - 551
Shakhov, F. N. - 805
Shaleeva, V. L. - 260
Shapiro, A. Ya. - 88
Shapiro, M. B. - 830
Shchedro, V. M. - 36
Shcheglov, G. M. - 134
Shevelkin, B. N. - 275, 285
Shibryaev, B. F. - 508
Shilov, Yu. K. - 70
Shitov, V. K. - 75
Shklovskaya, F. A. - 168
Shkoropad, D. E. - 327
Shlimak, I. V. - 202
Shlimak, Ya. B. - 375
Shlimovich, E. A. - 771
Shmuilov, N. G. - 75
Shreider, A. V. - 383
Shtain, L. L. - 370

Shtol', I. I. - 767
Shul'ga, N. G. - 823

Shumskii, K. P. - 442
Shvarts, G. L. - 750
Shvetsov, S. I. - 421
Sidorkina, Yu. S. - 262
Sil'nitskii, T. A. - 399
Simonov, A. V. - 691
Skalyga, L. A. - 306
Skripkov, I. V. - 124
Smolentsev, Yu. A. - 365
Smolyanskii, B. G. - 421
Sokolov, A. M. - 685
Sokolov, M. V. - 575
Sokolov, R. B. - 437, 707
Sokolov, V. I. - 595
Solodkov, V. G. - 332
Sorokin, L. A. - 128
Sorokin, M. M. - 736
Sorokin, Yu. L. - 779
Spasskii, V. V. - 752
Spektor, B. A. - 514
Stepanov, G. A. - 450
Stepanov-Grebennikov, N. M.
- 414
Stepanyanets, V. G. - 202
Strakhov, V. V. - 834
Sumets, A. M. - 646
Suslov, N. I. - 638
Sverdlov, A. A. - 848
Sypchenko, N. A. - 614

T

Tagiev, K. B. - 839
Talyanker, Yu. E. - 723
Tamarin, V. M. - 349
Tarynin, E. K. - 805
Tekhmishchyan, A. V. - 415
Teodorovich, V. P. - 303, 815
Ternovskii, I. A. - 616
Terzyan, G. O. - 562
Teteryukov, V. I. - 511
Timchenko, S. V. - 659
Timofeevskii, L. S. - 75
Timoshchenko, P. N. - 848
Tkachenko, G. P. - 411
Tkachev, A. G. - 651
Troshen'kin, B. A. - 527
Trukhin, A. Kh. - 106
Tupikin, B. F. - 112, 476
Tyutyunnikov, A. B. - 805

U

Ukolova, E. N. - 842

Usik, V. T. - 542
Uskovskii, G. A. - 829

V

Vainshtein, G. S. - 773
Val'dberg, A. Yu. - 500
Val'dman, A. G. - 760
Vasil'ev, M. M. - 23
Vasil'ev, Yu. A. - 681
Veksler, G. M. - 312
Veliulaev, A. M. - 548
Verkhorubov, B. A. - 351
Vinogradov, Yu. M. - 312
Vlasov, P. V. - 299
Volynchik, A. Z. - 308, 476, 769
Voronenko, L. M. - 758

Y

Yakhnina, V. D. - 95
Yakobson, Yu. V. - 575
Yakubson, A. M. - 34
Yavor, A. A. - 248
Yunger, S. V. - 258, 537
Yurchenko, B. D. - 185
Yurchenko, V. A. - 802
Yurgin, N. N. - 4

Z

Zablotskaya, N. S. - 643
Zadiraev, E. S. - 454
Zakharov, M. F. - 629
Zakharova, A. A. - 27
Zakharova, G. M. - 429
Zakurdaeva, E. G. - 640
Zalavskii, D. N. - 686
Zalesskii, V. I. - 404
Zamyshlyayev, V. G. - 522
Zanyukov, P. M. - 687
Zavgorodnii, V. K. - 113
Zhemchugov, V. N. - 362
Zheplinskii, B. M. - 823
Zhigach, A. F. - 489
Zhislina, L. S. - 433
Zhuchkov, A. M. - 764
Zhuchkov, V. N. - 522
Zhunev, P. A. - 345
Zhuzhikov, V. A. - 194
Zinchenko, R. G. - 544
Zolkin, B. V. - 687
Zolotar', A. I. - 134
Zotov, V. V. - 465
Zubov, P. I. - 49
Zverev, S. T. - 607

TABLE OF CONTENTS

CHEMICAL AND PETROLEUM ENGINEERING Numbers 1-12, 1966

(A translation of Khimicheskoe i Neftyanoe Mashinostroenie)

Engl./Russ.

Number 1	January, 1966	
Chemical and Petrochemical Processing Machinery Serving the National Economy	1	1
Automatic Control of an MG-350 Centrifuge — S. I. Mordovskii and N. N. Yurgin	4	4
Apparatus for Observing and Photographing Hydrodynamic Processes inside a "Transparent" Rotor when It Is Turning Over — I. G. Bespalov, L. V. Elistratova, and T. M. Chuzhaikina	10	8
Design of Channels of the Centrifugal Fan Impeller — M. I. Mishchenko	13	9
Determination of the Working Speed of a Ball Mill with Off-Axis Sections — A. V. Ryzhov .	16	11
Efficiency of Disks in NOGSh Type Centrifuges — M. M. Vasil'ev	23	15
Design of Mass-Exchange Apparatus and Reactors Including Longitudinal Mixing of the Phases — G. D. Kavetskii, A. H. Planovskii, L. A. Akopyan, and A. A. Zakhارова	27	17
Determination of the Inversion Point in Packed Absorption Columns at Constant Liquid Loading — L. I. Blyakhman and A. M. Yakubson	34	21
Investigation of the Operation of Absorption Apparatus with a Refluxed Ball Packing Type of Pseudoliquified Layer — N. I. Gel'perin, V. Z. Grishko, V. I. Savchenko, and V. M. Shchedro	36	22
Investigation of the Operation of Radial-Blade Stirrers in Flat-Bottom Cylindrical Vessels — I. N. Karasev and S. Ya. Gzovskii	42	26
Heat Exchange between a Gas and a Stream of Particles Falling from the Blades of a Drum-Type Drier — N. M. Mikhailov and L. A. Mamrukova	45	29
Effect of Pigments on the Physicomechanical Properties of Spray-Deposited Polyethylene Coatings — Yu. A. Avgustov, A. T. Sanzharovskii, and P. I. Zubov	49	31
Electrically Welded Pipes Made of Carbon Steels 10 and 20 for Chemical Equipment Construction — M. M. Kristal' and L. L. Kravchenko	53	34
The Problem of Finding the Strength of Locally Heat-Treated Welded Pipe Joints at High Temperatures and High Hydrogen Pressures — M. B. Asviyan	57	37
EXCHANGE OF EXPERIENCE		
Determination of Stresses in the Elements of the Mechanism of a High-Pressure Reciprocating Compressor — L. I. Mamon, M. G. Gubenko, A. V. Matukhno, and L. P. Glozman	64	42
Manufacture of Flanges from Flats by Hot Bending — V. A. Annenkov and I. G. Ploshenko	68	44
INFORMATION		
The Need for Further Improvements in the Manufacturing Technology of Chemical and Petrochemical Process Equipment — Yu. K. Shilov	70	46
[Bibliography]		47]

Number 2

February, 1966

The Results of Testing of a Lithium Bromide Absorption Refrigerator—L. M. Rozenfel'd, M. S. Karnaugh, L. S. Timofeevskii, N. G. Shmuilov, V. K. Shitov, and A. B. Andrezen	75	1
On the Performance of Metal Contact Seals—L. I. Éksler	81	5
A Method of Calculating the Output of Vacuum Molding Machines—N. A. Kozulin, and A. Ya. Shapiro	88	9
The Stainless Steel Nitriding Problem—M. D. Dvortsin and V. D. Yakhnina	95	13
Setting up Equations for Calculating the Economic Advantages of Machinery and Apparatus in the Chemical Industry—V. G. Saenko and L. P. Bregman	101	17
EXCHANGE OF EXPERIENCE		
Analysis of Some High Pressure Compressor Accidents—A. Kh. Trukhin	106	20
End Packing for Centrifugal Pump Shafts—B. M. Belyn	109	22
Miller for Trimming the Ends of Bubble Caps for Column Plates—N. P. Ryabets and I. V. Odnenko	111	23
High Efficiency Cutting Tool for Machining Stainless Steel Parts—B. F. Tupikin	112	24
INFORMATION		
Survey of Equipment Exhibited by Foreign Companies at the International Exposition "Chemistry in Industry, Construction, and Agriculture." Plastics Processing		
Equipment—V. K. Zavgorodnii	113	24
Plastics Screw Extruders—I. V. Skripko	124	32
Compressors—V. A. Rumyantsev and L. A. Sorokin	128	35
Pumps—L. N. Britvin, A. I. Zolotar', and G. M. Shcheglov	134	39
[Exhibit of Valves and Fittings—Yu. M. Kotelevskii and Yu. V. Kostin]		45]
CRITICISM AND BIBLIOGRAPHY		
V. I. Sokolov. Fundamentals of the Design of Food-Processing-Equipment Components— Reviewed by N. I. Gel'perin	141	47

Number 3

March, 1966

Determination of the Cylindrical Rigidity of Plates with Staggered Perforation —G. A. Salomatin	147	1
Comparison of Characteristics of Pulsation-Mixing and Vibrating-Plate Extractors —M. Z. Maksimenko, A. F. Galeev, and A. I. Gur'yanov	151	4
A Design Method for Improving Self-Acting Valves —A. I. Borisoglebskii and R. V. Kuz'min	155	6
Pressure Distribution in Compressor Piston Seals —S. M. Altukhov	162	10
Geometric Design of Planetary Mixers where the Blades Clean One Another —É. É. Kol'man-Ivanov and F. A. Shklovskaya	168	14
Joining the Drive Shafts of Drilling Machines through an Inflated Ring Clutch —A. A. Antonov	179	20
Analytic Method of Calculating the Work Done in Compacting Plastic Powders —N. F. Kunin and B. D. Yurchenko	185	24
Results of Tests on Cavitation-Impact Colloid Mills —V. M. Karaulov and A. N. Selivanov . . .	191	27
Methods of Determining the Specific Resistance of Filter Deposits —V. A. Zhuzhikov	194	29
The Use of Bent Elbows and Welded Joints in High Pressure Pipe Lines —A. A. Kurkumeli, V. V. Nizkii, and S. P. Gorbachev	197	31

Engl./Russ.

Quality Attained in Manufacturing Parts for the Hydraulic Portion of U8-3 and U8-4			
Drilling Pumps — S. G. Babaev, I. V. Shlimak, and V. G. Stepanyanets	202	34	
Analysis of Designs and Development of Standardization Proposals on Open Type Tricone			
Bits — A. A. Khalilov	207	38	
EXCHANGE OF EXPERIENCE			
An Efficient Method for Local Protection of Drill Bit Legs from Gas Carburization — K. T. Aliev			
and R. A. Akopov	214	43	
Intergranular Corrosion of Piping in Urea Production — I. G. Kharlampiev			
and A. N. Kuzyukov	218	45	
Modernized Ammonia Synthesis Column PMK-320-6 By-pass Valve — V. P. Klimov	220	46	

Number 4

April, 1966

Directives of the XXIII Congress of the Communist Party on Economy of Materials			
— A. V. Pleikin	221	1	
Use of Two-Layer Steel in Chemical Engineering Equipment — V. K. Kharitonov	225	4	
Some Design Features of Equipment Made from Two-Layer Steel — A. D. Domashnev	228	7	
Experience Gained in the Manufacture of Chemical Equipment from Two-Layer Steel			
— V. M. Makarov and T. A. Bikchentaev	232	10	
Some Problems in Strength Calculations for Vessels and Similar Equipment Made from			
Two-Layer Steel — V. I. Rachkov	236	13	
Two-Layer Steels for Chemical Engineering Equipment — S. A. Golovanenko			
and L. V. Meandrov	243	17	
High-Strength Two- and Three-Layer Steels — V. D. Katikhin, A. P. Kofman, P. O. Pashkov,			
and A. A. Yavor	248	20	
Use of Double-Layer Steels in the Construction of Petroleum Refining Equipment			
— V. G. D'yakov and Z. A. Abramova	253	24	
Use of Double-Layer Steels in Making Containers — S. A. Galdyrevskaya, N. V. Pavlov,			
G. I. Gerasimenko, and I. I. Gan	256	26	
Manufacture of Apparatus from Double-Layer Sheets Produced by the Explosion Method			
— I. N. Grekov, S. V. Yunger, Yu. I. Rubenchik, A. P. Kofman, G. F. Likhachev,			
and L. M. Bronshtein	258	27	
Butt Welding of Pipe Made of the Double-Layer Metal Kh14N18V2BR Steel + M3S Copper			
— I. N. Medrish, V. G. Bendrik, A. A. Kolyada, and V. L. Shaleeva	260	29	
Manual Electric Arc Welding of Double-Layer St. 3 + 0Kh23N28M3D3T Steel			
— A. P. Akshentseva, I. I. Gan, G. I. Gerasimenko, and Yu. S. Sidorkina	262	30	
Nondestructive Methods of Checking Chemical Apparatus Made of Double-Layer Metals			
— V. A. Bobrov and N. V. Khimchenko	266	33	
Corrosion Resistance of Double-Layer Metals — M. M. Kristal', V. N. Khalizova,			
and N. A. Adugina	271	36	
Special Features of Pressure-Working Double-Layer Metals — A. P. Golovanova			
and B. N. Shevelkin	275	39	
EXCHANGE OF EXPERIENCE			
Special Features of the Manufacture of Lead-Coated Heat Exchange Apparatus			
— V. G. Bendrik and V. V. Bulaev	280	42	
Cladding the Pipe Headers of Heat-Exchange Equipment with a Thin Sheet of Titanium			
— L. M. Samochatov	283	45	
INFORMATION			
Prospects for the Use of Double-Layer Metals in Building Chemical and Petroleum Machinery			
— B. N. Shevelkin and D. T. Loganov	285	46	

Number 5

May, 1966

Basic Ways of Raising the Technical Level of Chemical and Petrochemical Machinery			
Design in the 1966-1970 Period — K. I. Brekhov	287	1	
Expansion of a Fluidized Bed and the Carrying Away of Particles from a Bed of a Granular Material under the Action of Centrifugal Forces — N. I. Gel'perin, P. D. Lebedev, V. G. Ainshtein, and G. N. Napalkov	291	5	
Investigation of the Tightness of Fiberglass Tubing — P. V. Vlasov and A. V. Molokanov	299	10	
Effect of Hydrogen on Two-Layer Steel — N. N. Kolgatin, V. P. Teodorovich, and V. L. Deryabina	303	12	
EXCHANGE OF EXPERIENCE			
Manufacture of Heat Exchangers from VT-1-1 Alloy — L. A. Skalyga	306	14	
OP-3 Commercial Ozonizers — A. Z. Volynchik and V. F. Khmara	308	16	
Corrosion Testing of some Construction Metals in a Medium of Aluminum Ammonium Alum — N. P. Abalyan and R. A. Kropivnitskaya	311	17	
INFORMATION			
Survey of Equipment Exhibited by Foreign Firms at the International Exhibit on "Chemistry in the Service of Industry, Construction and Agriculture." Heat Process Chemical Machinery [Dryers, Heat Exchangers, Evaporators, Agitated Vessels, Pressure Vessels, Linings, Distillation Equipment] — G. M. Veksler, Yu. M. Vinogradov, and N. M. Samsonov	312	18	
Filtration Equipment — B. N. Borisoglebskii	320	24	
Centrifuges and Separators — D. E. Shkoropad	327	29	
Mixing and Blending Equipment — M. L. Morgulis and V. G. Solodkov	332	34	
Grinding, Classifying, and Size Reduction Equipment — A. D. Lesin and R. V. Lokshina	336	37	
Ball Valves and Their Basic Designs (Survey of Foreign Designs) — P. A. Zhuneyev, Yu. M. Kotelevskii, and L. L. Eksler	345	44	
ERRATUM	348	—	

Number 6

June, 1966

Testing of Plate and Brush Heat Exchangers in Heating a Viscous Liquid — E. A. Radionova and V. M. Tamarin	349	1	
Improved Temperature Control in Low-Pressure Ethylene Polymerization Unit by Using Two Control Channels — B. A. Verkhorubov	351	2	
The Effect of the Slope of the Perforated Plate on the Operation of a Column — A. N. Kovshov, A. D. Nikiforov, P. G. Boyarchuk, and D. S. Artamonov	358	7	
On the Effect of the Roughness of Impeller Channels on the Characteristic of a Centrifugal Pump — S. A. Abdurashitov, D. G. Beletskii, N. N. Gudnin, and V. N. Zhemchugov	362	10	
Experimental Determination of the Coefficients of Weakening of Perforated Plates Subjected to Tensile Loads — Yu. A. Smolentsev	365	12	
On the Working Cycle of a Separator with Centrifugal Discharge of Solid Matter — R. Ya. Iashvili, B. D. Kukalenko, S. A. Plyushkin, and P. G. Romankov	367	13	
On the Problem of the Determination of Gas Pressure Losses during the Charging Period in Piston-Type Gas-Expansion Machines — L. L. Shtein	370	15	
Wear Resistance of 40KhR and 40KhN Steels Used in the Fabrication of Drill String Tool Joints — Ya. B. Shlimak	375	17	
Corrosive Action of Cooling Water on Condensation-Cooling Equipment — Ya. P. Podkol'zin and V. A. Lyalin	380	20	

Effect of Composition of the Water Coolant on Corrosion Resistance of AMg Alloy under Operating Conditions of Condensers in Oil Refineries—G. L. Cherepakhova, A. V. Shreider, and I. Ya. Klinov	383	23
Ability of Clad Steels to Resist Hydrogen Attack—Yu. I. Archakov and I. D. Grebeshkova	388	27
Tapping a Thread on High Strength Drill Pipes with Hard Alloy Prismatic Thread Chasers —S. A. Babayan, G. K. Frantsuzov, I. A. Il'in, and Ch. G. Bairamov	396	32
Raising the Level of Technology and Production Management in the Manufacture of Parts for Oil Field Equipment—T. A. Sil'niksii	399	34
Analysis of Economic and Technological Factors Involved in the Manufacture of Thin-Walled Bottoms by Pressing and Rolling—V. I. Zalesskii, Yu. I. Kozlov, and S. T. Lin	404	37
EXCHANGE OF EXPERIENCE		
Bead Cracking Control in Manual Arc Welding of Annular Seams in High-Strength Joints —R. A. Sataev	407	39
Rubber Lining of Chemical Equipment for Service in Wet and Dry Chlorine Gas; IRP-1212 and IRP-1213 Linings—A. A. Samsonova	409	40
Inverted X-radiograph for Inspection of Cylindrical Vessels—G. P. Tkachenko	411	41
A Gasteit Cutting Machine—I. G. Pushko	413	42
A Fixture for Turning and Facing Pipe on a Lathe—N. M. Stepanov-Grebennikov	414	43
INFORMATION		
Fluid Couplings in Centrifuge and Crusher Drives—A. V. Tekhmishchyan and A. V. Krutik .	415	43
Some Types of Petroleum Field Equipment Exhibited at the Exposition of Achievements of the National Economy—S. Yu. Mikhaél'	418	45

Number 7

July, 1966

Some Distinctive Features of Self-Priming Devices for Centrifugal Pumps—V. G. Kovalenko S. I. Shvetsov, and B. G. Smolyanskii	421	1
Investigation of the Sealing of Bayonet Locks—V. M. Makarov and V. I. Nevesenko	424	3
Rubber-Metal Seals for Stop Valves—P. L. Belokurov, M. Z. Magid, and G. M. Zakharova . . .	429	7
How to Determine Wall Thickness and Optimum Degree of Perforation of the Cylindrical Shell of a Centrifuge Bowl—L. S. Zhislina	433	10
Experimental Separators with Sediment Discharge by Electro-Osmosis—N. A. Kozulin and R. B. Sokolov	437	12
Generalized Equation for Calculating the Rate of Condensation of Steam to Solid State —K. P. Shumskii	442	16
Notched Springs for Service in Corrosive Media—V. A. Borzenko, A. E. Kulikov, and N. T. Pokhodenko	445	17
Manufacture of Aluminum Plate Heat Exchangers—N. S. Baranov and G. A. Stepanov	449	20
Welding Corrugated Expansion Joints for Process Piping—B. F. Korneev, S. T. Moiseev, and E. S. Zadiraev	453	23
Ultrasonic Inspection of Weld Seams in Multilayer Strip-Wound Pressure Vessels —L. B. Berezovskii and A. A. Dmitriev	457	26
Improvement of the Quality and the Prolongation of the Service Life of Enamelled Valves —Zh. N. Akhmechet and N. V. Nizhnikov	459	27
Pricing of Uniform Items in Oxygen Production Machinery—V. V. Zотов	464	31

EXCHANGE OF EXPERIENCE

Use of Standard-Frequency Electric Dehydrators in Desalination Plants at Oil Fields —Ya. I. Pinkovskii	470	35
Reduction of the Moisture Content of Filter Cake by means of Squeezer Rolls—F. M. Pospelov and K. N. Shabalin	473	37

Continuous Production of Chemical Process Machinery—B. F. Tupikin, E. F. Efremov, and A. Z. Volynchik	475	38
Preparation of a High Pressure Vessel for High Temperature Service—I. A. Frumkin, V. I. Kozlov, A. V. Kuznetsova, and V. G. Ostanin	479	41
Repairing a Casting Flaw in the Cooling Barrel of a Carbonizing Column—A. A. Makarenko ..	482	43

INFORMATION

Metal Cord Rubbercoating Line—V. G. Goshenev	484	44
All-Union Conference of Staff Workers in Chemical and Petrochemical Process Machinery Manufacture—A. M. Monastyrskaya	486	45

CRITICISM AND BIBLIOGRAPHY

N. P. Chermousov, A. N. Kutin, and V. F. Fedorov. Pressurized Chemical and Technological Machines and Equipment—Reviewed by A. F. Zhigach and A. F. Popov	489	47
--	-----	----

Number 8

August, 1966

Design and Fabrication Technology of Bayonet Joints: Mechanisms and Main Parts

—V. M. Makarov and V. I. Nevesenko	491	1
Photoelectric Batcher for Corrosive Liquids—P. P. Neugodov and V. A. Genel'	497	6

Choice of Water Feed Injector Design for Venturi Tubes—A. Yu. Val'dberg

and F. E. Dubinskaya	500	8
----------------------------	-----	---

High-Pressure Immobile Packings—B. A. Belevtsev and V. A. Freitag

504 11

Cermet Filtering Elements for the Purification of Corrosive Liquids and Hot Gases

—B. F. Shibryaev	508	13
------------------------	-----	----

Effect of Body Shape on Performance of Water-Ring Vacuum Pumps—V. I. Teteryukov

511 15

Results of a Study of Straight-Flow Valves—B. A. Spektor and V. K. Kishkis

514 17

Calculation of the Stability of Thin-Walled Cylindrical Shells—V. M. Kulakov

517 19

Effect of Recirculation of Phases on the Efficiency of Tank Extractors—N. I. Gel'perin,

—V. L. Pebalk, V. G. Zamyslyayev, and V. N. Zhuchkov	522	23
--	-----	----

Concentration of Latex in Rising Flow—B. A. Troshen'kin and V. Ya. Gal'tsov

527 26

Crevice Corrosion of Titanium Alloys in Acids—Yu. S. Ruskol and I. Ya. Klinov

529 28

Workability by Pressure of the Two-Layer Sheet St. 3 Steel + NP-2 Nickel—A. P. Golovanova

533 30

EXCHANGE OF EXPERIENCE

Manufacture of Petrochemical Equipment from Heat-Treated Low-Alloy Steels

—S. V. Yunger, I. N. Grekov, and L. M. Bronshtein	537	33
---	-----	----

Experience in the Design and Application of High-Pressure Cartridge Filters—Yu. M. Khanukovich
and E. I. Porfir'ev

540 35

Experience in the Organization of Closed-Cycle Specialized Production Lines and Sections

Mechanized at Several Levels—V. T. Usik	542	36
---	-----	----

Sulfurization Applications in Surface Hardening in the Chemical Process Industry

—I. G. Kharlampiev and R. G. Zinchenko	544	37
--	-----	----

INFORMATION

"Prizma" Pressure Transducer for Plastic Melts—D. A. Polyakov

546 38

Operating Experience at the Uzbekkhimmash Plant—A. M. Veliulaev

548 40

Operating Experience of the Penzhkimmash Plant—D. F. Il'enkov

550 41

Operating Experience at the Lt. Shmidt Machinery Factory in Baku—A. A. Shakhnazarov

551 42

Operating Experience of the S. M. Kirov Oil Field Drilling Equipment Factory —B. N. Kasimov

and V. A. Kirsanov	552	43
--------------------------	-----	----

867

BOOK REVIEW

V. S. Gorokhov, <i>Air Separation Plant Equipment: Design and Calculations</i> -Reviewed by N. A. Matveev	553	44
--	-----	----

Number 9

September, 1966

National Awards for Industrial Progress	557	1
Collaboration between Member Nations of the Council for Mutual Economic Aid (COMECON) in the Chemical and Petrochemical Process Machinery Industry - G. O. Terzyan	562	4
Specialization and the Development Outlook for Pump Production in COMECON Countries - Yan Faron	567	8
Improved Design and Fabrication Technology of Integral Welded Cylindrical Screen Baskets for Centrifuge Bowls - M. M. Abelev	571	11
Automatic Pneumatic-Controlled Frequency-Pulse Liquid Proportioners - A. L. Gurevich, Yu. V. Yakobson, and M. V. Sokolov	575	13
New Centrifugal Multistage Spray Nozzle Design - A. N. Leventsov	578	15
How Mesh Packings Can Be Used in the Rectification Towers of Air Separation Plants - V. P. Alekseev, Yu. D. Navrotskii, V. M. Braun, and A. E. Poberezkin	581	18
On the Design of Long-Slit Uniform-Resistance Extrusion Heads - V. S. Kim and A. N. Levin	584	19
Design of Elliptical Closures Loaded by External Pressure - V. I. Rachkov	589	23
Investigation of the Strength of the Rotor Joint Ring in Liquid Separators - V. I. Sokolov and I. V. Koshelev	595	26
Effect of Nonplanarity on the Operation of a Sieve Plate - A. N. Kovshov, L. S. Aksel'rod, A. N. Planovskii, A. D. Nikiforov, V. V. Dil'man, and L. S. Pozin	599	28
Investigation of Heat Transfer from the Spray Side of a Spray Heat Exchanger - F. A. Ovenko and S. A. Balitskii	603	30
Decarbonization Annealing as a Method for Improving the Enameling Properties of Steel - M. S. Poljak, S. T. Zverev, and G. V. Petrov	607	33
Behavior of Carbon Steel during Manufacture of Dished Bottoms and Vessels by Cold Rolling with a Single Roll - Yu. I. Kozlov and S. T. Lin	609	34
EXCHANGE OF EXPERIENCE		
Design Improvements in NGP Centrifuges - G. A. Pereyaslov	612	36
Pipe Bending by Induction Heating - N. A. Sypchenko	614	37
Resistance to Corrosion of Certain Metallic Materials in Sulfurous and Alkaline Waste Products of Oil Refineries - L. A. Poluboyartseva, A. A. Reifer, and A. L. Libin . .	615	38
Some Problems in the Repair of Tube Bundles in Furnaces - I. A. Ternovskii	616	38
Device for Cutting Raschig Rings from Stainless Steel Tube Waste	620	41
INFORMATION		
New Device for the Contactless Measurement of the Outside Diameter of Plastic Pipe - P. A. Khil'chuk	621	41
REVIEW OF FOREIGN LITERATURE		
[Modern Equipment for Producing Biaxially Oriented Thermoplastic Thin-Gage Films -G. S. Vainshtein, V. N. Konstantinov, and I. M. Koretskii]	42]	

CONSTRUCTION AND DESIGN OF MACHINES AND APPARATUS		
Aspects of the Design and Construction of Nonlubricated Rotary Plate Compressors -		
A. V. Reshkin	623	1
Investigation of the Performance of an Automotive Tire Builder Drive Drum -		
V. S. Anisimov and M. F. Zakharov	629	5
Proper Design of a Round Anchor Agitator - I. N. Karasev and S. Ya. Gzovskii		
Size Reduction Efficiencies and Specific Power Input - V. I. Akunov	633	7
NEW MACHINERY AND APPARATUS		
Twin-Shaft Mechanically Unloading Mixer - N. I. Suslov		
638	10	
Stop Valves and Control Valves for Corrosive Streams - E. G. Zakurdaeva and Ya. Ya. Karps		
640	11	
Filter-Adsorber for Purification of Air from CO ₂ at Low Temperatures -		
V. P. Alekseev, Yu. D. Navrotskii, N. S. Zablotskaya, I. Ya. Lyubarskii, and A. A. Gusev	643	13
Continuous-Operation Mixer Reactor for Liquids - A. M. Sumets		
646	15	
INVESTIGATION AND CALCULATION OF THERMOCHEMICAL PROCESSES		
Calculation of the Number of Theoretical and Actual Plates in Rectification Columns by Means of the Enthalpy Diagram - V. A. Ivanov, A. N. Planovskii, and V. I. Astakhov		
647	15	
Effect of Vapor Condensation on Convective Heat Exchange in a Fin-Type Gas Cooler - A. N. Berezkina and A. G. Tkachev		
651	18	
NEW MATERIALS AND CORROSION CONTROL		
Study of Polyamide Aging in Aqueous Medium - M. N. Bokshitskii and V. D. Budanov		
654	19	
Steel that is Resistant to Stress Corrosion Cracking in Alkaline Media -		
G. G. Pocheptsova and S. V. Timchenko	659	22
Corrosion of Carbon and Stainless Steels in the Production of Active Carbon Black - I. V. Kolmogorov and N. I. Ershova		
661	24	
EQUIPMENT MANUFACTURING TECHNOLOGY		
New Methods of Manufacturing Oversized Chemical Equipment - G. V. Raevskii and S. M. Biletskii		
663	25	
Hydraulic Pressing of the Flexible Elements in Expansion Joints - V. N. Frolov		
668	28	
Composite Machining of Hexagonal Holes in Headers of Complicated Shape -		
A. V. Nosov	674	32
Technical Features Involved in Mechanized Quality Control of the Coatings Used in Manufacturing Enamelled Chemical Tank Equipment - A. N. Morokh, O. V. Belokon', N. G. Mikhailus', and V. V. Cherkasov		
677	35	
QUALITY, RELIABILITY, AND ENDURANCE		
Results of an Evaluation of the Reliability of the Brake Shoes Used in Drilling Derricks - S. G. Babaev, Yu. A. Vasil'ev, and M. Yu. Askerov		
681	37	
EXCHANGE OF EXPERIENCE		
Limitation of the Dead Time Losses During Automatic D. C. Welding -		
A. M. Sokolov and B. I. Kalyaev	685	39
Constructional and Engineering Improvements in the Production of Column Equipment - D. N. Zalavskii		
686	39	
Modernizing the Method of Attaching the Blades onto a Sorter Shaft -		
P. M. Zanyukov and B. V. Zolkin	687	40
Experience with Metallizing Chemical Apparatus for Producing Sulfuric Acid -		
I. Z. Kagan	688	40

Fixture for Mass-Production Milling of Hexagonal Rods on Vertical Milling Machines - N. G. Pushko	689	41
Electrohydraulic Nut Driver - V. V. Osipov and A. V. Simonov	691	42
Boring Tool	692	42
Mandrel for Holding Conical-Ended Milling Cutters	693	43
 INFORMATION		
First All-Union Scientific and Engineering Conference on Construction of Chemical, Petrochemical, and Petroleum-Refining Apparatus and Machinery - A. M. Monastyrskaya	694	43
Production of Heat-Exchange Equipment in Japan - B. Z. Abrosimov and R. Z. Rakhmilevich	698	45
[BIBLIOGRAPHY		47]

Number 11

November, 1966

Chemical and Petroleum Machine Construction and the Great October Celebration	701	1
 DESIGN AND CONSTRUCTION OF MACHINERY AND EQUIPMENT		
Distributing Device for Film Evaporating Apparatus - M. A. Kharisov and V. B. Kogan Structural Features of Separators where the Precipitate is Taken out by Electro- endosmosis - R. B. Sokolov and N. A. Kozulin	705	4
Investigation of the Operation of Equipment for Feeding Powders in Continuously by Volume - A. V. Chuvpilo	707	5
Indicating High-Speed Compressors - É. A. Levin	710	6
	716	10
 NEW MACHINERY AND EQUIPMENT		
Precoat Vacuum Drum Filter - M. K. Petrov	720	12
Carbon Dioxide-Ammonia Compressor Without Lubrication of Cylinders - Yu. E. Talyanker	723	14
New Design of a Separator for Sorting Out Finely Disperse Suspensions - R. Ya. Iashvili, S. A. Plyushkin, and P. G. Romankov	728	16
 INVESTIGATION AND CALCULATION OF THERMOCHEMICAL PROCESSES		
Speeding up the Operation of Vacuum Evaporation Equipment with an External Boiling Zone, During Evaporation of Viscous Solutions - E. M. Kovalev and I. M. Koval' Determining the Injection Coefficient in a Water-Air Injector with Aerating Nozzles - B. N. Basargin, N. I. Gel'perin, and B. G. Ossovskii	730	17
Certain Problems of Heat Transfer in Oil Vapor Vacuum Pumps - M. M. Sorokin and A. V. Chechetkin	733	19
Movement of Material in Drum-Type Granulators - Yu. I. Gusev	736	20
	741	24
 NEW MATERIALS AND CORROSION CONTROL		
Pyrocermamics for the Chemical Engineering Industry - A. V. Goryainova, V. V. Deg- tyarev, and V. N. Maragaeva	746	26
Stability of Construction Materials in Sodium Chlorite Solutions - G. L. Shvarts, O. I. Belya, and V. N. Maragaeva	750	29
Corrosion Stability of Alloy Steels in Monochloroacetic Acid - V. V. Spasskii and V. A. Rusalkin	752	30
 EQUIPMENT MANUFACTURING TECHNOLOGY		
Investigation of Tubes Made from Kh18N10T Steel and Bent with Heating by VHF Current - L. L. Agamalova, V. A. Bocharov, V. K. Degtyareva, and A. S. Karakulov	753	31

Finish Grinding of Calender Rolls with Synthetic Diamond Abrasive Wheels – A. A. Sagarda and L. L. Mishnaevskii	756	33
Use of an Electrochemical Method for Final Finishing Pressure Mold Patterns – L. M. Voronenko, I. I. Moroz, and G. A. Alekseev	758	34
ORGANIZATION AND ECONOMICS OF PRODUCTION		
Scientific Organization of Labor at Chemical and Petroleum Machine Construction Enterprises – A. G. Val'dman, S. T. Golod, and A. N. Rumyantsev	760	35
QUALITY, RELIABILITY, AND LIFETIME		
Wear of the Parts in Annular Air Jet Mills – A. Ya. Artamonov, A. A. Dan'kin, A. A. Markov, and A. M. Zhuchkov	764	37
EXCHANGE OF EXPERIENCE		
Mechanized Bayonet Lid for Boiling Vessels of the Cellulose Industry – T. A. Bikchentaev and I. I. Shtol'	767	39
Experience in the Use of Plastics at the Kurgankhimmash Plant – A. Z. Volynchik and V. A. Bubnov	769	40
Gang Mandrel for Static Balancing – V. S. Firtich	770	41
URPD-64 Manually Operated Gas Arc Torch for Cutting Nonferrous Metals and Stainless Steel – E. A. Shlimovich	771	41
Filters for Melted High-Polymer Materials (Review of Foreign Designs) – V. N. Konstan- tinov, G. S. Vainshtein, and V. I. Klochkov	773	42
BOOK REVIEWS		
S. G. Gurvich, G. A. Il'yashchenko, and S. Kh. Sviridenko. Machinery for Use in Process- ing Thermoplastic Materials – Reviewed by V. S. Kim	778	45
[BIBLIOGRAPHY		46]

Number 12

December, 1966

DESIGN AND CONSTRUCTION OF MACHINERY AND EQUIPMENT		
Determining the Optimum Cross Section of a Venetian-Blind Separator – Yu. L. Sorokin, I. N. Popchenkov, and V. S. Burkat	781	1
Investigation of Safety Valves for Low-Viscosity Liquids – N. I. Mel'nikov and Yu. I. Dombé	785	3
Horizontal Centrifugal Fractionator for Air Separation with a Multi-Turn Spiral Cartridge – A. M. Arkharov and O. A. Lomakina	791	7
Design of Three-Blade Chisels for Calibrating Wells – I. N. Kazarov	794	9
NEW MACHINERY AND EQUIPMENT		
Shell-and-Tube Heat Exchanger, with the Tube Headers Made of Steel-Titanium Double- Layer Metal – B. A. Galitskii, A. L. Belinkii, and L. P. Kolosova	797	11
Atomizer for a Vapor-Liquid Raw Material Mixture – V. M. Kurganov	800	12
INVESTIGATION AND CALCULATION OF THERMOCHEMICAL PROCESSES		
Determination of the Output of a Working Element of a Mechanical Rotating-Plate Absorber with Conical Plates – V. A. Yurchenko, A. A. Koptev, and G. S. Pogosov	804	14
Investigation of the Efficiency of Standard Bubble Plates – A. B. Tyutyunnikov, F. N. Shakhov, E. K. Tarynin, V. L. Burin, and A. D. Nikolaenko	807	16
Investigation of Hydrodynamic Relations on Sieve Plates at High Spray Densities – M. É. Aérov, P. G. Boyarchuk, T. A. Bystrova, L. S. Pozin, and I. I. Lagover	811	18

NEW MATERIALS AND CORROSION CONTROL

Corrosion Stability of Nickel-Free Steels and Steels of Reduced Nickel Content in Production of Complex Fertilizers and Ammonium Nitrate – A. V. Makarova and É. K. Malakhova	815	20
Effect of Hydrogen at High Temperatures and Pressures on Mechanical Properties of Metals – V. P. Teodorovich, N. N. Kolgatin, and V. I. Deryabina	817	21
How Temperature Conditions and Autoclave Vibration Affect the Stability of Autoclave Lining in Sulfur Refining Service – N. G. Shul'ga, B. M. Zheplinskii, A. A. Markhadaev, and A. K. Mikhailov	825	27

EQUIPMENT MANUFACTURING TECHNOLOGY

Technological Details in the Fabrication of Chemical Pump Parts Made of Phenolite-RST – K. A. Moskatov and L. F. Grigor'eva	828	28
Effect of the Variation of Inspection Temperature on the Effective Diameter of the Thread in the Heads of Borehole Pump Rods – A. M. Sarkisova, A. M. Lerner, and G. A. Uskovskii	831	30

QUALITY, RELIABILITY, AND LIFETIME

Extension of the Service of Compressor Valve Plates – M. B. Shapiro, A. V. Lopin, and L. E. Semikina	832	31
The Problem of Determining the Tolerance on the Angle of the Conical Surfaces of the Head and the Seat of a Drilling Pump Valve – V. V. Strakhov, A. Ya. Raikhel', P. A. Gyandzhuntsev, and S. G. Babaev	836	33

ORGANIZATION AND ECONOMICS OF PRODUCTION

Transport Factor in the Selection of the Location of Plants Producing Oil-Field Equipment – Z. A. Akhundov and K. B. Tagiev	841	35
---	-----	----

EXCHANGE OF EXPERIENCE

Properties of Austenitic-Ferritic Metal Deposited with ÉA-1B-Type Electrodes – E. N. Ukolova and G. M. Ogorodnikova	844	37
High-Output Perforation Die – I. P. Dekhanov	846	38
Pneumatically Actuated Pumps for Hydrostatic Testing – N. P. Ryabets and I. V. Odnenko	848	39

INFORMATION

High-Temperature Steam Superheater – S. P. Gorislavets, K. E. Makhorin, A. P. Kozhan, P. N. Timoshchenko, and A. A. Sverdlov	850	40
For Expanded Production of Enamel-Lined and Ceramic-Lined Chemical Equipment – V. I. Rublev	852	41
Welding of Chemical Equipment Made from Two-Layer Sheet with Titanium Protective Layer (Review of Foreign Literature) – N. T. Lositskii, A. A. Grigor'ev, and G. V. Khitrova	854	42

INDEX

Author Index, Numbers 1-12, 1966	859
Table of Contents, Numbers 1-12, 1966	862



